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## ABSTRACT

Accountability proponents have been so preoccupied with "how" to secure compliance that they have scarcely paused to consider the educational worth of the full range of academic subjects for all students. The framers of national standards in U.S. history, for example, fail to raise as even a possibility that multiple years of required history courses in both elementary and secondary education may not be ideal for each and every student. But even in an era of accountability, educating the gatekeepers is properly the cornerstone of teacher education. This paper advances a view of teacher education rooted in the pedagogical demands of subject matter. It argues that accountability measures such as learning standards and teacher testing are indirect and feeble means of enhancing teacher competence in subject matter and method. Contains 14 references. (BT)

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# The Pedagogical Demands of Subject Matter: Implications for Teacher Educators<sup>1</sup>

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Teacher education has been a stepchild, perhaps an orphan, in the recent accountability movement. Policies on both standards and high-stakes testing rely on coercion and exhortation to induce teacher compliance. Teachers are expected to implement a curriculum having played no part in the formulation of its aims. Nor have those aims been fully considered; rather, policy-makers have uncritically accepted the educational worth of the traditional academic subjects. The tacit image of teacher education in this scheme is training delivery agents for an agreed upon program of study. The teacher's role is to "motivate" all students to learn subject matter regardless of whether the teachers or students have any interest in it (see Noddings, 1997).

Accountability proponents have been so preoccupied with *how* to secure compliance that they have scarcely paused to consider the educational worth of the full range of academic subjects for all students (see Thornton, in press a). The framers of national standards in United States history (Nash, Crabtree, and Dunn, 1997), for example, fail to raise as even a possibility that multiple years of required history courses in both elementary and secondary education may not be ideal for each and every student. The framers appear to be answering the question, as Ralph Tyler (1949) warned of subject specialist involvement in curriculum making, "What should be the elementary instruction for students who are later to carry on much more advanced work in the field?" (p. 26).

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<sup>1</sup> Paper prepared for a College and University Faculty Assembly symposium, "Teacher Education in an Age of Diversity and Accountability," at the annual meeting of the National Council for the Social

Planning an effective educational program, however, requires far more than identification of what subject matter should be learned: What are the purposes of this subject matter, for instance, from the perspective of the learner or from the perspective of society? How can an educational program be designed and implemented to achieve these purposes? How can we determine whether these purposes are being attained? Integral to answering all these questions—since the curriculum cannot teach itself—is the teacher as curricular-instructional gatekeeper (Thornton, 1991). Neither precise specification of what should be taught nor coercive high-stakes tests will entirely circumvent gatekeeping. It will occur; the only question is will it be done well or less well. State-level learning standards documents (e.g., New York State Education Department, 1996), for example, present lists of inert information and skills. It is teachers who must realize, to use Miriam Ben-Peretz's (1975) apt term, the "curriculum potential" of the information and skills.

Thus, even in an era of accountability, educating the gatekeepers is properly the cornerstone of teacher education. "Cornerstone" though it may be, the education of gatekeepers in American higher education is a fragmented affair. Responsibility for subject matter is assigned to liberal arts departments and for method to schools of education. Rarely is there much communication, still less collaboration, between these academic units. Fragmentation is further legitimated by state teacher-licensing procedures. As evidence of professional competence for an initial license, for instance, states such as New York test teachers separately in subject matter and pedagogy. This separation of subject matter and method is a major problem in social studies teacher education (Thornton, in

press b). Changes are needed in both the subject matter and methods preparation of social studies teachers.

Perhaps the most significant problem in teachers' subject matter education is its poor alignment with the school curriculum. The history, geography, and social science courses undergraduates take may bear scant relationship to what they will teach. In this sense, it is ironic that subject specialists' insistence on the same standards for all schoolchildren contrasts with the wide choices they afford their own students.

Of course, it is sometimes argued that teachers cannot be prepared in a direct way for the subject matters of the school curriculum because the curriculum is constantly changing. At least in the case of the social studies, however, this assumption seems mistaken. Although subject matters such as the experiences of African-Americans and women have received greater attention in recent decades, the basic curriculum framework has been remarkably stable for several generations (Thornton, in press c).

Meanwhile the college curriculum in history, geography, and the social sciences has greatly altered. In my ten years on the Teachers College faculty, I have learned that even students with a shared undergraduate major such as history may share next to no common knowledge of their subject. Apparently many undergraduates pick and choose what they will study and breadth requirements appear to have become less common. The subject matters that currently interest historians, however, may be less than ideal for the demands of school teaching. Historians' current fascination with the "new" social and cultural history may contribute little to understanding topics such as American constitutional foundations required in the schools. Still more serious is that many universities—including my own—have long since abolished their geography departments

even though this subject matter is universally taught in schools. In sum, it appears that few college graduates are well prepared in the range of social studies subject matters schools actually teach.

This disjuncture between the subject matter needs of teachers and what they study as undergraduates was not always so pronounced. A primary mission of teachers colleges was education in the pedagogical demands of subject matter. Although these colleges are long gone (and can rightly be criticized on various grounds), the *idea* of focusing on the pedagogical demands of subject matter remains appealing. Although the move to universities may have enhanced the status of teacher education, universities have been far less responsive to the subject matter needs of teachers.

The subject matter needs of teachers and subject majors may differ in significant respects. Geography majors, for instance, will properly focus on the current scholarly scope of the subject. Teachers, however, may profit more from geography courses that provide a deep understanding of elementary geography from a higher standpoint (Noddings, 1999). Consider, for instance, the fourth grade study of world physical regions such as grasslands, deserts, and forestlands. This material may be of scant interest to many geographers, but it is a basic building block for children learning about human-environmental relationships (Thornton, in press b).

Although geography professors may have no special obligation toward the school curriculum, they do have a clear responsibility for the needs of students in their charge. We do not necessarily expect that physics majors and engineers will study identical elements of physics. After all, physicists may wish to pursue largely theoretical questions, but engineers have an overarching, practical concern: "Will this bridge stand up or fall

down?" This same recognition of differing professional needs is seldom applied to teaching. A program for teachers may properly differ from a program for subject majors. While such a program would be different, it need not be any less rigorous. It should be possible, as Nel Noddings (1999) has pointed out, to treat elementary material in such a way that teachers gain in both pedagogical strength and knowledge of higher geography (p. 214).

In addition to subject matter, preparation in method also warrants reconsideration. In effect, judging from sources such as methods textbooks, "method" has been reduced to "technique" or what John Dewey (1966/1916) called "general" methods: five-step lesson plans, unit plans, behavioral objectives, CLOZE tests, motivation, special learners, inclusive perspectives, and so forth. Such a technical view of method creates the mistaken impression that the teacher's own inventiveness, experience, and experimentation are largely irrelevant to effective method. But as curricular-instructional gatekeepers, teachers do not merely transmit a curriculum. They are more than conduits; in a significant sense, teachers construct the curriculum that most matters, the curriculum enacted in classrooms. Of course, general methods should be part of preparation in method, but their effectiveness stems, Dewey noted, from their "reinforcement" of "personal ways" in method (p. 171).

Methods preparation should emphasize teacher interaction with a rich array of instructional materials that model the effective direction of subject matter to desired results. But this is precisely what often fails to happen at present (Thornton, in press b). Judging again from methods textbooks, their focus is on general methods. There are seldom rich treatments of representative topics that form the mainstays of the curriculum

such as the United States constitution, the women's suffrage movement, and the geography and cultures of Mexico. Curriculum innovations that make it to the classroom level, experience suggests (e.g., see Buckingham, c. 1935; Banks, 1970; Grambs, 1976), organize subject matter with respect to its pedagogical demands (see Thornton, in press c).

Methods courses and textbooks should provide models of the arrangement of subject matter in use. Rather than treating map skills, economic principles, and historical causation as abstractions, their pedagogical potential will be more evident in the context of actual subject matter. For example, consider the study of the Tennessee Valley Authority. A methods treatment of this subject matter could begin with the historic environmental problems of the valley such as flooding, deforestation, and erosion and associated social problems of poverty and disease. Issues of public ownership of utilities and New Deal social experimentation could be introduced. The TVA could be evaluated, including both successes such as flood mitigation and improved navigation as well as problems such as loss of river valley land. Attention might also be given to the reaction of business to competition from government enterprise. Such an arrangement of subject matter gives finite meaning to map skills, economic principles, and historical causation. In addition, it also presents opportunities for student decision-making on important issues of public policy.

In conclusion, the view of teacher education I have advanced is rooted in the pedagogical demands of subject matter. Accountability measures such as learning standards and teacher testing, I have argued, are an indirect and feeble means of enhancing teacher competence in subject matter and method. Indeed, these measures may exacerbate



rather than remedy the problems they are intended to allay. The challenge for teacher educators—in both the liberal arts and education—is to devise programs that improve rather than undermine the effective direction of subject matter to desired results.

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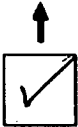
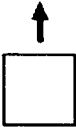
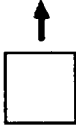
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